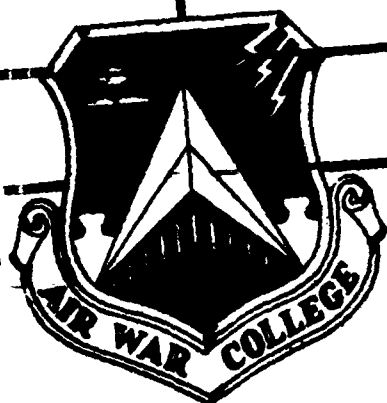


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# AIR WAR COLLEGE

## RESEARCH REPORT

THE EGYPTIAN AIR FORCE: INSURANCE FOR  
U.S. NATIONAL INTERESTS IN THE MIDDLE EAST

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LT COL STEPHEN B. PLUMMER

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MAXWELL AIR FORCE BASE, ALABAMA

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THE EGYPTIAN AIR FORCE: INSURANCE FOR U.S. NATIONAL  
INTERESTS IN THE MIDDLE EAST

by

Stephen B. Plummer  
Lieutenant Colonel, USAF

A RESEARCH REPORT SUBMITTED TO THE FACULTY  
IN  
FULFILLMENT OF THE RESEARCH  
REQUIREMENT

Thesis Advisor: Dr. David E. Albright

MAXWELL AIR FORCE BASE, ALABAMA

APRIL 1988

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# AIR WAR COLLEGE RESEARCH REPORT ABSTRACT

**TITLE:** The Egyptian Air Force: Insurance for U.S. National  
Interests in the Middle East

**AUTHOR:** Stephen B. Plummer, Lieutenant Colonel, USAF

A synopsis of history making events in Egypt from the overthrow of King Farouk in 1952 until 1988. Remarks on the contrasting leadership styles of Nasser, Sadat and Mubarak. A brief history of the Egyptian Air Force as well as lessons learned from past wars. An analysis of pros and cons of being a Soviet protege and the rationale behind the switch from east to west. A comparative analysis of the Egyptian and the Israeli air forces of 1988. An assessment of Egyptian foreign policy in 1988 and an assertion of similarities between it and U.S. national interests within the region. The author believes that by continuing to supply Egypt with vast amounts of military and economic aid, the U.S. will achieve a balance of power between Israel and the moderate Arab states, increasing regional stability and serving U.S. interests in the region.

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## INTRODUCTION

Egypt is a veritable giant in terms of geostrategic value in the Middle East. Her soil provides the land route between Africa and Asia, and her waters provide the sea lanes connecting the Mediterranean Sea and the Indian Ocean. Egypt's role as informal leader of the moderate Arab states places her squarely in the middle of United States' national security policy interests in the region.

Since President Anwar al-Sadat's expulsion of the Soviets in 1972, Egypt's relationship with the United States has profited both countries. Yet in spite of the tremendous amounts of U.S. aid poured into Egypt in the decade of the 1980's, the government of Hosni Mubarak is grappling with severe foreign and domestic problems - problems with the capacity to breed revolution and destruction. At times it seems the Mubarak government is walking a tightrope of explosive issues, balancing one against the other.

In spite of Egypt's internal problems and its growing desire to emerge from the 1979 ostracism by the Arab world, the U.S. needs Egypt. This paper will explain why. Furthermore, it will focus on the new Egyptian Air Force (EAF), re-equipped with western hardware and technology. It will make the case that the EAF of the 1980's is a much more credible force than ever before, and provides an insurance policy, of sorts, protecting U.S. national interests in the region of Southwest Asia and Northeast Africa.

As background for the development of this thesis, Chapters I - III will provide a review of significant events which shaped the history of Egypt from the end of World War II until 1988. An understanding of the power politics of Nasser and Sadat, as well as the fundamental Arab

philosophy regarding Israel, is essential, and will serve as a framework for development of this thesis. Inherent within this framework is a hot and cold U.S. / Egyptian relationship which these first three chapters will examine. Chapter IV will briefly sketch the origin and development of the EAF. It will discuss the various Arab-Israeli wars, commenting on successes, failures and lessons learned. It will address the change in acquisition of hardware and training, and assess the wisdom of this change. Most important, the chapter will detail the vastly improved capability of the EAF, and lay the groundwork for consummation of the thesis in Chapter V. The chapter will conclude with a comparison of the Egyptian and Israeli air forces. Chapter V will be the conclusion. It will outline the similarities between U.S. and Egyptian national interests in the region and argue that a strong, independent Egypt will continue to serve U.S. interests in the Mideast.

## CHAPTER I

### EVENTS WHICH HELPED SHAPE THE HISTORY OF FOREIGN POLICY FROM 1945 TO 1970

#### Introduction

The year 1952 is a landmark year in the history of Egypt. In that year a group of military officers overthrew the government of King Farouk. Even more significant is the opportunity that this overthrow afforded the Egyptian presidency to determine the political destiny of Egypt. Beginning with the administration of Gamal Abdel Nasser, several significant events occurred which shaped the future of Egyptian politics on a global scale. A review of these events is essential to understanding the relationship between Egypt and the United States.

#### From Kings to Presidents

The decade following World War II marked an important time in the history of Egypt. The allied powers had defeated Germany and efforts were under way to rebuild and reinvigorate a decimated European continent. When it became obvious that the Soviet Union had expansionism in mind, the United States and her allies moved quickly to establish alliances and economic aid programs designed to preserve the outcome of the war and discourage Soviet aggression. Egypt, at this time, was undergoing internal problems of her own, in the form of political instability caused, in part, by an inept government and the ever unpopular British occupation. The lack of sound government characterized by rising prices, unemployment, palace suppression of

opposition political parties and the King's personal life..., " led to complete disorder in January 1952.<sup>1</sup> Cairo was pillaged and many areas were burned. Gamal Abdel Nasser and a group of military officers known as the Free Officers, took this opportunity to overthrow the government of King Farouk in July 1952.<sup>2</sup> This coup eventually led to the establishment of Nasser in power.

It was apparent to most Egyptians that the overthrow of the monarchy was a good thing for the country, but it was also soon clear that the Free Officers had not thought much beyond the actual revolution itself.<sup>3</sup> Governmental leadership under a strong authority was not immediately forthcoming, resulting in an ineffective foreign policy and a domestic policy mostly concerned with political reform.<sup>4</sup> Nor did the political maturation of President Nasser occur overnight. Several things happened during this climate of unrest which served to secure Nasser's power and give direction to his foreign policy. Among them were the movement toward nationalism and sovereignty.

### **Egyptian Nationalism**

The emergence of modern day Egyptian nationalism, which began shortly after the end of World War II, was supported by several factors that significantly contributed to the movement. The first was Egypt's longstanding desire to totally free herself from British colonization. Throughout the 72-year span of British occupation, Egyptian nationalism smoldered but did not ignite. Although Great Britain officially terminated its protectorate in 1922 and thereby allowed "conditional"

independence to Egypt, it was not until the Anglo-Egyptian settlement of 1954 that Egypt gained full, unconditional independence.<sup>5</sup>

Second, in response to the post-World War II Communist threat, President Nasser believed the best defense was in promoting "internal economic and social development and in affirming the spirit of nationalism and independence."<sup>6</sup> Contrast this to other areas, notably Western Europe and Southeast Asia, in which the U.S. was building safeguards against Communism with alliances such as the North Atlantic Treaty Organization (NATO) and the Southeast Asia Treaty Organization (SEATO). It can also be successfully argued that the emergence of the nation state of Israel in 1947 caused a convergence of Arab nationalism unlike any seen to date. This "common enemy" theory of nationalism has not only persevered, but has grown stronger over time, beginning with the first defeat of combined Arab forces by Israel in 1948. The realization by Egypt of the important role it must play in the Middle East, and the growing desire to play that role, not only propelled Egypt into the foreground of politics on a global scale, but ironically, served to alienate U.S. policy makers under President Dwight Eisenhower.

#### **U.S. Policy Shortcomings**

The United States recognized that, politically and strategically, Egypt was in a position to assume a leadership role among the Arab nations. Realizing that this was supportive of U.S. interests in the area, both President Harry Truman and President Eisenhower began to encourage a foreign policy designed to take advantage of that belief. In 1953 the U.S. went so far as to state that British presence in Egypt

was a source of instability, and obstructed U.S. national interests in the area.<sup>7</sup> The British left, as we know, but Washington's efforts to establish close relations with Egypt were largely ineffective due to fundamental disagreements between Secretary of State John Foster Dulles and President Nasser over the shape that the Middle East should take.

In the opinion of this writer, the U.S. was ill-prepared in the post-World War II time frame to attempt to impose a perspective on Egypt. Secretary Dulles, the primary administrator of foreign policy under Eisenhower, never saw clearly, or at least never acknowledged, the reason that his policy was doomed to fail. For a joint policy between two countries to succeed, it must serve the needs of both parties, or at least be perceived to do so by both governments. The overriding national interest driving U.S. foreign policy overtures during this time was the containment of Communism throughout the free world, hence the push for a "NATO" type coalition in the Middle East. Secretary Dulles never grasped the degree to which Egypt and the Arab nations were opposed to such an organization, and the insistence with which he pursued the policy soon led to strained relations between Cairo and Washington.

In addition, the Arab nations were genuinely concerned with Israel, specifically that there be an Arab solution to the problem of Palestine and not a U.S.-imposed solution. The fact that the U.S. was Israel's primary supplier of economic and military aid was not lost on the Arab leaders, and to this day remains a significant obstacle in the pursuit of a meaningful U.S. foreign policy in the area.

Just as the U.S. was obsessed with the containment of Communism, President Nasser was obsessed with regional problems such as his own newly acquired power, the state of Israel, and the need to preserve Egypt's newfound sovereignty. This conflict of perspectives between a great power with global interests and an inferior power with regional interests, further heightened the tensions between the two countries and thoroughly frustrated U.S. policymakers. The following statement by Secretary Dulles clearly demonstrates the degree of frustration and growing impatience with which the west viewed Nasser's new government.

Now the thing we are up against is a rather extreme view which the Arab countries in general, and Egypt in particular take on this thing which they call nationalization and 'sovereignty.' Nasser can hardly speak more than a couple of sentences but what he has to bring in 'sovereignty' - 'sovereignty' - they apparently conceive it as being the right to prove that you can step on other people's toes with impunity. But we all know, who have some maturity in these matters, that sovereignty - its best expression involves the harmonization of policies, coordinating them and working for the common good. But countries that have newly won their wings of independence incline toward taking initially an extreme view. They are hypersensitive about this thing. But it is so demonstrable that in the long run it is going to hurt Egypt and the other Arab countries.<sup>8</sup>

#### Nasser and the Russians

As previously mentioned, it took President Nasser's government several years to realize legitimacy on a global scale. His initial reluctance to concern himself with interests beyond Egypt's regional problems significantly slowed this process, but certainly did nothing to damage his popular appeal. In fact, it may be argued that Nasser's enemies, the West and Israel, went far toward projecting him onto the international plane.<sup>9</sup> His initial successes in foreign policy further

established Egypt as a leader among the Arab nations and increased his popularity among Arabs in general, fueling the rise in Arab nationalism.

While Nasser was busy rejecting U.S. ideas of a partnership defense against the spread of Soviet influence in the Middle East, the U.S. was busy rejecting Egypt's requests for arms. Congress was concerned that the type and amount of arms desired by Egypt would give the Egyptian armed forces offensive capability against Israel, and so was evasive about the request.<sup>10</sup> Therefore, it does not seem surprising that it was the Soviets who filled that void by responding favorably to a request for aid from an impatient Nasser. Support from the Soviets came in the form of military assistance in September 1955 and backing for Egypt in the 1956 Suez War against Britain, France and Israel. Probably the most significant reflection of support, however, was economic aid, the most notable feature of which was the Aswan High Dam.<sup>11</sup>

By all appearances U.S. nearsightedness in foreign affairs had squandered the opportunity to form a meaningful alliance with the emerging leader of the Arab world. The Soviet Union continued to be a pillar of support for the Egyptians until 1972.

To cast total blame for Egypt's shift toward the Soviet Union on U.S. policymakers and legislators would, of course, be a gross oversimplification. Had the Congress been more receptive to Nasser's original request for aid, it is possible that events pertaining to the Arab-Israeli crisis, and the development of a legitimate Arab coalition of states under the leadership of Egypt, would have better supported U.S. interests in the Middle East. On the other hand, it is also conceivable that events would not have been appreciably different, due

to a course that Nasser set in foreign affairs early in his tenure as president. This course, termed Positive Neutralism, involved juggling the great world powers and skillfully playing them to achieve Egyptian interests. Such a non-alignment policy was extremely successful for Nasser, due in part to the strategic value placed upon Egypt by both eastern and western powers. It was not until the mid-sixties that the increasing anti-Arab flavor of American politics significantly weakened this method of dealing with other nations.<sup>12</sup>

### The Suez

Although nationalization of the Suez Canal on 26 July 1956 took the world by surprise, it made good economic sense on Egypt's part. The canal was potentially Egypt's most important economic asset. The British government owned 44 percent of controlling interest in the canal, and private French citizens owned over 50 percent. Revenue from the canal in 1955 amounted to \$100 million, of which Egypt received a paltry \$3 million. Besides the gross inequality of revenue sharing, the situation represented a painful and expensive reminder of Egypt's colonial past.<sup>14</sup>

While there was no sound legal basis on which to challenge Nasser's move, it still resulted in economic pressure by Great Britain, France and the United States prior to the actual breakout of hostilities. The U.S. admitted the western powers were treading on thin ice. One American official observed:

There is no doubt that Egypt has the right, if she wishes, to nationalize the Suez Canal Company, assuming that adequate

payments are made. If Nasser does not go further and does not disrupt the operation of the Canal, then everything will be all right.<sup>15</sup>

The optimistic view of this official discounted the emotional aspects of canal ownership, which were not lost on the governments of France and Great Britain. Although they planned the invasion of Egypt under the pretext of protecting their interests, both countries, in fact, looked upon the nationalization question as an opportunity to punish Nasser for his opposition to British and French colonialism in North Africa.<sup>16</sup> In addition, the overthrow of Nasser's government appeared to be a target of Anglo-French action.<sup>17</sup>

Israel joined with France and Great Britain in 1956, and some argue that Israel's case for war was much stronger than either that of the European powers. To begin with, Israeli leaders were concerned over the recent Soviet-sponsored military buildup, which gave the Egyptians an improved first-strike capability. Moreover, Israel wanted to break the Egyptian blockade in the Gulf of Aqaba. Finally, launching a "preventive campaign" in concert with France and Great Britain would make forceful opposition by the U.S. less likely, all at a time when Egypt was less able to defend herself.<sup>18</sup>

President Eisenhower responded to this recourse to arms with a 31 October nationwide broadcast which summarized the U.S. position.

The United States was not consulted in any way about any phase of these actions. Nor were we informed of them in advance.... As it is the manifest right of any of these nations to take such decisions and actions, it is likewise our right, if our judgement so dictates, to dissent. We believe these actions to have been taken in error. For we do not accept the use of force as a wise and proper instrument for the settlement of international disputes.<sup>19</sup>

The Suez War produced two significant outcomes. First, the combined Anglo-French invasion effort was a failure. Not one stated objective was achieved. Although Israeli efforts produced superior results by destroying much of Egypt's newly acquired Soviet equipment, Nasser was able to blame the failure of his army in the Sinai on the Anglo-French attack. Second, the mere fact that allied powers invaded Egypt set Nasser up as a martyr, which solidified his hold on the government. President Nasser had turned military defeat into a political triumph.<sup>20</sup>

#### **Nasser's Final Years**

President Nasser continued his policy of positive neutralism, balancing major power nations against each other for the betterment of Egypt for several years, even though U.S. anti-Arab policies reduced its effectiveness. In fact, this policy may have contributed to the 5 June 1967 pre-emptive attack on Egypt by the Israeli Air Force (IAF). Partly in response to accusations by other Arab states that Egypt had taken a soft approach to Israel, Nasser began taking steps which Israel interpreted as a rapid escalation in the threat to its existence. A rational assessment of the forces available to both nations would lead one to conclude that an attack by Egypt would be futile. While President Nasser understood this, he may have overlooked the paranoic Israeli fear of extermination at the hands of the Arabs.<sup>21</sup>

Whatever political victory Nasser hoped to achieve was denied him, when on 5 June the IAF delivered a surprise blow that virtually destroyed the Egyptian Air Force. Of a total 550 aircraft, 350 were

destroyed, but possibly more damaging was the loss of five Egyptian bases and the utility of five others, which were now too close to the occupied Sinai.<sup>22</sup> This defeat was to demonstrate the true strength of Nasser's charisma, for after the devastating war he resigned his presidency, only to be called back by popular demand. The resignation and subsequent recall of Nasser provides the non-Arab world with an insight into the tremendous popular appeal he enjoyed, and the legitimacy it brought to his government.<sup>23</sup>

Nasser's task in the aftermath of the Six-Day War was formidable. He had to somehow bring about a diplomatic settlement of the war, unify Arab support of Egypt, and rebuild the Egyptian military, all the while maintaining domestic order.<sup>24</sup> Reclaiming occupied territory was his primary goal, and the means of achieving this was to be through the regeneration of a strong military. As early as March 1969, Nasser felt as though Egypt with Soviet help, had regained sufficient military strength to permit the resumption of armed incursions along the occupied fronts. This escalation of conflict, coupled with Egypt's inability to conduct an all-out war against Israel, led President Nasser to settle for the "War of Attrition," which began in March 1969 and did not end until just before his death in September 1970.<sup>25</sup>

#### Summary

President Nasser recognized the geostrategic value of his country and the leadership role it had to play in order to achieve Arab solidarity in the region. He led Egypt to a nationalistic pinnacle while charting a course which would keep Egypt squarely in the center of

international politics regardless of who succeeded him. Egyptian accomplishments under his leadership are impressive. Most notable among them, in my opinion, is the High Dam at Aswan, which future generations will look upon as the "Pyramid" of Nasser. He can be called a twentieth-century pharaoh, the ruler who led the world's most prominent Arab nation into international politics and global respectability.

## CHAPTER II: 1971 TO 1981

### Introduction

This chapter will continue the analysis of events which determined the direction of Egypt foreign policy. Although Anwar al-Sadat was a close supporter of Nasser, that fact had little bearing on his decision to continue foreign policy in the Nasser tradition. The impatience of Sadat to correct what he perceived to be gross violations on the part of the Soviets and the Israelis, led him to change his foreign policy style. Also, in this chapter we see the size and composition of military forces, specifically the Air Force, begin to take on more importance as a stabilizing factor and even as a negotiating tool.

### Succession and Transition

Sadat was elected president on 15 October 1970 in what was initially a smooth transition to power.<sup>1</sup> Sadat's close ties with Nasser, dating back to military academy, and Sadat's prominent role in the 1952 Revolution of the Free Officers gave him some degree of credibility with the Egyptian populace. His credibility with the various power centers which had formed around Nasser in his last decade was another story, however. Within six months of taking office, Sadat had removed his Vice-President and Minister of the Interior and had accepted the resignations of several other high-ranking officials after thwarting an attempted overthrow.<sup>2</sup> His ambitious government reorganization eliminated centers of power and the resultant threats

they posed, and clearly was the first step taken to "de-Nasserize" Egypt.<sup>3</sup> In addition, his early position on foreign policy promised no drastic changes from the policy of his predecessor. He vowed to pursue Nasser's aims in the areas of national honor, Arab unity, anti-imperialism, international non-alignment, Egyptian leadership in the Arab world, alliance with the Soviet Union, and opposition to Israel.<sup>4</sup>

On the domestic front, Sadat generated a revival of Egypt's national spirit which paid dividends by allowing greater freedom of action in the foreign policy arena. The economic policy of Egypt became infitah, or "open door" policy to the west. This policy, in concert with a strong move to eradicate many of the social injustices of the Nasser era, was designed to accomplish two primary goals. The first was to push economic growth ahead of population growth. The second was to free Egypt from her dependence on other countries, particularly the Soviet Union, for arms.<sup>5</sup>

#### The Soviet Expulsion

Cairo's relations with Moscow began deteriorating long before Sadat came to power. As Egypt grew more and more dependent on Soviet aid, the concepts of Egyptian nationalism and sovereignty became more and more a waning reality. The Six-Day War left Egypt critically short of military equipment and trained personnel, a shortage the Soviet Union was only too happy to meet. By maintaining a protector relationship with Egypt, the Soviets retained their foothold in North Africa and their vital naval bases at Alexandria, Port Said, and Mersa Matruh. In fact, 90

percent of Russian military and technical advisors in North Africa were stationed in Egypt in 1970.<sup>6</sup> Soviet engineers were assigned to the power producing stations associated with the High Dam at Aswan, the industrial areas of Helwan and Heliopolis, and in construction work at the three Mediterranean ports. Advisors were put into virtually every branch of the Egyptian armed forces, including the General Staff and the Ministry of War. The superior attitudes displayed by virtually all Soviets in Egypt was demeaning to Egyptian soldiers and rapidly became a point of contention, which would later contribute to their expulsion.<sup>7</sup>

In spite of the bitterness that the Soviet presence caused, Moscow provided Egypt with \$2.5 billion worth of military equipment in 1970, comprised mostly of advanced aircraft, as well as several thousand pilots and missile crews. This brought the total military aid to \$4.5 billion between June 1967 and June 1972.<sup>8</sup> Egypt had become a virtual Soviet protectorate.

Regardless of this massive infusion of aid, President Sadat did not see the Russians as cooperative. Neither did he see a solution to the problem of occupied territory, over which he had put himself in a difficult position by proclaiming timetables for ousting Israeli forces.<sup>9</sup> In addition, while the Soviet aid was immense, it was not the type of weapons that Sadat desired. Egypt required offensive weapons: medium or long-range surface-to-surface missiles and the most sophisticated fighter available, the Mig-23.<sup>10</sup> After three futile trips to Moscow to present his case, a thoroughly frustrated Sadat expelled the Soviets from Egypt in July 1972.

Aside from the frustration that Egypt felt with the Soviets, two other possible reasons for the ouster must be considered. First, Sadat could have been using the threat of expulsion as blackmail, deriving the weapons he needed in return for the use of the Mediterranean ports by the Soviet Navy. When the Soviets refused to play, Sadat had no choice but to go through with his threat. Second, the move could be seen as a gesture toward the U.S., in hopes that Washington could persuade the Israelis to adopt a more flexible position regarding occupied territories.<sup>11</sup> Whatever the exact reason, Bernard Lewis, Professor at the School of Oriental and African Studies at the University of London, probably stated it best in saying:

The Egyptians have drawn their inference - that the Israelis have a good patron, while they themselves have had a bad one. Israel's patron is trustworthy and reliable, and provides what the protegee wants; Egypt's patron on the other hand has failed her in almost every respect, and has left her significantly worse off than she was before....<sup>12</sup>

#### The Yom Kippur War

On 6 October 1973 Egypt, in concert with Syria, shocked the world by launching a massive surprise attack against Israeli-occupied land. The causes and results of that initiative are significant and warrant a close inspection as background for this thesis.

The immense popular support enjoyed by Nasser was not shared by Sadat at any time during the decade he served. Sadat did not possess the charisma of Nasser, nor did he command the respect of the leaders of the Arab nations the way Nasser did. On top of this, Nasser's legacy of an unraveling foreign and domestic policy, plus the embarrassing defeat

in 1967, severely damaged the psyche of the nation.<sup>13</sup> Domestic growth was stymied at the expense of fueling the nation's war machine from 1967 to 1972. The myth of Israeli invincibility was fast becoming reality in the minds of Egyptian military officers and civilians alike.<sup>14</sup> The net effect was a domestic stagnation which had to be broken if Egypt was to resume her credibility as leader of the Arab world. "The country's doubts had to be resolved, its fears exorcised."<sup>15</sup>

In spite of the overwhelming need to do something to break the stagnant state of affairs, President Sadat was also fully aware that a unilateral war with Israel was probably not winnable. He therefore enlisted the help of several other Arab nations, most notably Syria, and planned a strategy designed to force intervention by the superpowers and ultimately persuade Israel to withdraw to pre-1967 borders.<sup>16</sup> For only after the territory issue was decided, did Cairo feel talks could begin which had a chance to bring negotiated peace to the region. As a side benefit Sadat hoped a credible showing by the Arab coalition would restore dignity and self respect to the Arab armies, and subsequently gain the credibility which his government severely lacked.

Notwithstanding the fact that history will view this war as an Israeli victory, if we accept Clausewitz' assertion that war is merely the continuation of politics by other means, then surely Egypt's claim to victory has merit. It has merit because Sadat's political objectives were achieved. The U.S. and the U.S.S.R. both became involved at once and were influential in bringing about not only a cessation of hostilities between the Arabs and Israel but a United Nations resolution which paved the way for further talks and a negotiated peace settlement.

Egypt eventually regained the Sinai Peninsula and, at the partial expense of her relationship with the other Arab countries, a peace with Israel which has lasted 14 years. Finally, the gamble provided Sadat with the single great act that solidified his government and provided him with the opportunity to move out of Nasser's shadow.<sup>17</sup>

Along with the positive benefits of the war came debits. The policy chosen by Sadat of peace at any cost was criticized by many Arab nations as aiding in the destruction of Pan-Arabism. After 1973, the constant reminder that kept the Arabs from ignoring their own fragmentation was Sadat's "electric shock" type of diplomacy.<sup>18</sup> In addition, with the U.S. now involved in peace negotiations, Arab solidarity took on a new meaning for Egypt. Sadat quickly shifted his power axis from Cairo-Damascus to Cairo-Riyadh, since the oil producers wielded more influence in Washington than did Arab military radicals. However, since Arab solidarity was based on a strategy of war with Israel, this conflicted with Cairo's desires and caused Sadat to move in the direction of a Cairo-Tel Aviv axis.<sup>19</sup>

#### **Bilateral Peace**

As stated, Sadat's original goal in October 1973 was to force the superpowers to intervene in the stalemate of no war - no peace between the Arab States and Israel, and to force Israel to withdraw to pre-1967 borders. By all accounts he was successful up to this point, as United Nations Resolution 242 clearly mandated that nations refuse to recognize territories siezed during the act of war. While this resolution certainly legitimized the Arabs' complaints of Israeli expansionism, it

was several years before the withdrawal was begun, and even then commencement of the withdrawal required the second round of Sadat's "electric shock" diplomacy as a catalyst, namely his visit to Jerusalem.

Sadat literally had no other choice than to make the trip. Since the 1973 cease fire, Egypt's internal problems had significantly worsened. The population was growing at a rate which far outpaced the ability to house or feed them. New investments and development projects were nil for lack of foreign money, even though favorable economic regulations were in effect to attract overseas capital. The country had supported the war machine for too many years, and the economy was bled white.<sup>20</sup> Another Arab-Israeli war would likely have destroyed Egypt and toppled Sadat's government.

The decision to go to Jerusalem was not supported by the majority of the Arab nations, who looked upon the move as an effort to "sell out" to Israel at their expense. In fact, Sadat was forced to contend with significant resistance from within his own government. Rejectionist movements were formed which amounted to little more than a public statement of condemnation toward the Cairo government.<sup>21</sup> Various groups of the Palestine Liberation Organization (PLO) were more vocal, however. PLO leader Yassir Arafat stated before Sadat had left Israel that, "occupied Jerusalem will only be regained through blood and struggle and not through capitulation and kneeling."<sup>22</sup> The Syrian-backed group of the PLO, the Saiga, actually called for Sadat's assassination by stating that, "the blood of the treacherous Sadat and all agents cooperating with him inside and outside Egypt should be spilled."<sup>23</sup>

The history-making speech which President Sadat gave to the Knesset emphasized those issues which were basic to the peace process from the Arab point of view. He ended by summarizing the issues.

...return of all occupied Arab lands; recognition of the Palestinian right to an independent national entity; acceptance of the basic right of all countries in the region to live in peace under reasonable guarantees; agreement by these nations to observe the terms of the UN charter by resolving conflict through peaceful means; and termination of the state of war dominating the area.<sup>24</sup>

Although Sadat's overtures met with only a lukewarm reception from the Israeli government, the general Israeli population, as well as the western nations, were overjoyed. Most Arab countries and the Palestinians viewed the visit with skeptical disbelief. However, the bold effort broke the longstanding psychological barrier between the two countries and allowed for direct talks to begin.<sup>25</sup>

#### Camp David

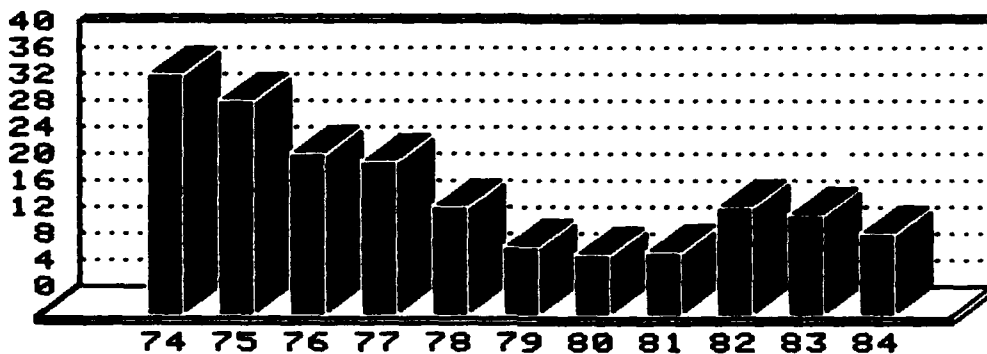
By January 1977 the exhilaration felt by the Egyptians over their successful crossing of the Suez Canal was wearing decidedly thin. In four years of Kissinger's shuttle diplomacy the only accomplishments were a separation of the combatants and the return of a few small pieces of land.<sup>26</sup> Egypt, meanwhile, was suffering from the ills spawned by the government's massive arms investments. (See Chart 1 on page 22.)

In spite of a trend toward decreasing annual investments following the 1973 War, a big part of Egypt's Gross National Product (GNP) was spent on arms at the expense of basic social needs. Sadat tried to break this stalemate by sponsoring a U.N. resolution calling for a Geneva summit in 1977. The conference was doomed from the start by a dispute over the

right of the PLO to take part. The U.S. and U.S.S.R. attempted to revive the conference, but this effort was soundly rejected by both sides. Jerusalem considered the effort "unprecedented, unnecessary, ill-timed, and ill-phrased."<sup>27</sup> Equally as strong was the rhetoric voiced by Egyptian Foreign Minister, Ismail Fahmy, who expressed the view held jointly by the Arab states.

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CHART 1  
PERCENT OF EGYPTIAN GNP SPENT ON ARMS



SOURCE: INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES,  
WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS, (LONDON, 1986).

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Any arrangements agreed upon by the two superpowers express only their own views, because they are achieved on the basis of their interests and outlook. We, however, have our own interests and outlook. Whatever weight and importance the views of the two superpowers have on the international level, they cannot themselves decide our fate and influence our rights. Therefore, we do not take their decisions and statements as self-evident, as though they contain the seven pillars of wisdom, but we take them for information only.<sup>28</sup>

What followed Sadat's trip to Israel was basically months of direct talks by Cairo and Jerusalem with little, if any, progress toward peace. U.S. efforts up until mid 1978 were of little consequence. Washington's

attempt to soften the stance taken by the Arab Rejectionist Front (Algeria, Libya, Iraq, Syria and South Yemen) by inviting Soviet participation proved futile. On 4 August 1978, in an attempt to save the bogged-down peace process, President Jimmy Carter dispatched his Secretary of State, Cyrus Vance, to the Middle East with the express purpose of inviting Prime Minister Menachem Begin and President Sadat to Washington for a summit meeting in early September.<sup>29</sup> On 5 September 1978, delegations from Egypt, Israel and the United States met at the presidential retreat at Camp David, Maryland, for the stated purpose of reaching an agreement for peace in the Middle East. After twelve days of negotiations in which President Carter skillfully served as mediator, the Camp David accords were signed in Washington.

The first accord was entitled "The Framework for Peace in the Middle East." It consisted of a preamble and three major sections which contained the guidelines for a settlement on the West Bank and Gaza Strip, involving Egypt, Israel, Jordan, and the Palestinian people.<sup>30</sup> The second accord was called "The Framework for the Conclusion of a Peace Treaty Between Israel and Egypt," and it described the process and timetable by which the Sinai Peninsula would be returned to Egypt.<sup>31</sup> In the opinion of this writer, the Camp David Accords constitute the most significant achievement in the search for a Middle East peace since the beginning of the modern day Arab-Israeli conflict. It has created a bilateral peace, strained though this may be at times, between Egypt and Israel. There remains, however, much to be done. It is now ten years since the signing, and the issue of Palestinian autonomy is still the single biggest roadblock to peace.

Although there was sharp dissent among factions of both governments in the debate following Camp David, the accords were ratified by both the Egyptian and Israeli parliaments. The rejectionist front, headed by Syrian President Hafez Assad severely denounced the accords as doing nothing to fulfill Palestinian rights.<sup>32</sup> History would prove President Assad's observation to be correct.

On 26 March 1979, Israel and Egypt signed a peace treaty. The treaty, which resulted from negotiations emanating from the second accord, provided for the end of war between the two countries, a phased Israeli withdrawal from Sinai, Israeli right of passage through the Suez Canal, and Israeli right to purchase Egyptian oil. On 31 March 1979, eighteen Arab League nations and the PLO broke diplomatic and economic ties with Egypt.<sup>33</sup>

#### Sadat's Final Years

During the remainder of Sadat's time in office, his popularity rose in the west at the expense of his prestige at home. Most western nations viewed Sadat's actions as selfless and contributing to the common good and world order. Many Egyptians, on the other hand, perceived a different set of motivations for peace, and while they welcomed the restoration of a peaceful coexistence with Israel, they were skeptical about the prospects of prosperity. Egyptians, for the most part, did not perceive a strong Communist threat and were reluctant to see an alliance formed with the United States. Such an alliance would further serve to broaden the rift between Egypt and the remaining Arab nations, that the bilateral treaty had produced. Finally, the west

was perceived as primarily materialistic, which was contrary to feelings among Egypt's Islamic groups.<sup>34</sup>

As Sadat's popularity grew abroad, its decline at home began to take its toll on Egypt. Political unrest and instability increased rapidly, fueled in part by Israel's obvious lack of commitment regarding the West Bank and Gaza. The Israeli raid on the Iraqi nuclear reactor indicated that Jerusalem was acting with no restraint whatsoever. Indeed, Egyptians saw Israel as taking advantage of the separate peace to strike out at the rest of the Arab world.<sup>35</sup> Moreover, Sadat never achieved that which was fundamental to all Arab nations, Palestinian autonomy. As a result, Sadat's efforts to preserve his government became like the very oppression he professed to oppose throughout his presidency. He was assassinated on 6 October 1981, eight years to the day after his crucial decision to attack Israel. Author Ghali Shoukri, in his book Egypt: Portrait of a President, best answers the questions of who, what, why and how.

Death was the Egyptian people's verdict on the whole regime and not just the person of Sadat. Violence came in the execution of that decision, as a reaction to the extreme violence of the regime in repressing the opposition. It was the fruit of ten years of slow accumulations. It was carried out by an Egyptian officer on 6th October 1981, a symbol of the victorious Army's revenge and a reminder to people that the Armed Forces are the legal offspring of the Egyptian people.

It was not an assassination, but an execution, not of Sadat but of the system. The religious extremists were not responsible for this condemnation, but the Egyptian people, with their national progressive democratic opposition, were. The motivating factors were the national Arab identity that Sadat's regime wanted to wrest from them, and the way of life inflicted upon a poor nation that does not want to increase its poverty.<sup>36</sup>

## Summary

If Nasser placed Egypt in the center of international politics, Sadat certainly solidified that position with his own brand of diplomacy. By now it is very apparent that Egypt has a great and diverse number of issues with which to contend, many of which conflict with the spirit and intent of Arab nationalism, and thereby pose a threat to the security of Egypt as a sovereign nation. If Egypt is going to remain the strong, valuable ally the U.S. needs in the region, she must regain eroded credibility in the vital areas of political stability, economic solvency, and military potency. Sadat's contributions toward this end were herculean, and in large measure made possible by his forward-looking diplomatic style coupled with his overwhelming desire for peace.

## CHAPTER III: 1982 TO PRESENT

### Introduction

The successor to Sadat, Hosni Mubarak, is the first president since the 1952 revolution who is not a product of the Free Officers. Mubarak is one of a new breed of professional military officers who emerged from the 1973 War. The policies of Nasser, namely his belief in the ideological pan-Arab movement, contrasted with those of Sadat, who tended to put Egypt first and Arab nationalism a distant second. Nasser was successful due to his charisma and immense popular appeal. Sadat's success was a direct result of his securing a peaceful coexistence with Israel, although how he went about it contributed to his demise. In spite of the contradistinction between their regimes, both Nasser and Sadat shared one common belief. Both attempted to mold Egyptian will to support their respective policies.<sup>1</sup> Mubarak is neither Sadat nor Nasser.

### President Hosni Mubarak

The new president, in a gesture of national reconciliation, released many of the political and religious dissidents jailed under the Sadat regime. He has shown greater accommodation of opposition to his democratic government than either of his predecessors and is willing to tolerate and talk with religious groups that are committed to a peaceful resolution of Egypt's problems.<sup>2</sup>

Mubarak's foreign policy has likewise distinguished itself from Sadat's. In an attempt to patch up relations with the Arab nations, he

terminated the anti-media campaign against them which had gained full force under Sadat at the signing of the Egyptian-Israeli peace treaty. While he has held fast to the commitments of the Camp David peace process, Mubarak has sought a rapprochement with the Arab countries. In fact today only Libya and Syria are still openly hostile and will not trade with Egypt.<sup>3</sup> The trend toward less military spending that had continued under Sadat, reversed itself under Mubarak, although military outlays have not reached the staggering amounts of the pre-1977 years. (See Chart 1 on page 22.) This reversal is highly consistent with Mubarak's military background.

The problems which plagued Sadat have not gone away, however. Egypt's economic picture is dismal and getting worse. Falling oil prices as well as the resultant erosion of worker remittances have seriously depressed the economy. Without U.S. aid, Egypt would be able to feed only about half of her 50 million people. Tourist trade, hurt by recent terrorism, is down 40 percent. Anti-American sentiment is resurfacing. A resurgence of Islamic radicalism in the military is taking place, although the extent of this movement is still not certain.<sup>4</sup> All of these are problems which President Mubarak must successfully overcome, if he is to re-install Egypt as the leader of the Arab world and still maintain peace with Israel.

#### Summary

Clearly for Egypt to rise above her economic woes, Mubarak must dismantle the current economic system. This entails reducing internal subsidies, price controls and bureaucratized management of the large

public sector, all of which contribute to low agricultural and industrial productivity, and more importantly, inhibit private investment.<sup>5</sup> The degree of political repercussions entailed in carrying out the necessary reform would be substantial. Thus far, the Mubarak government has yet to propose a viable solution to the problem.

The critical area in which Mubarak has excelled is the military. Clearly, the Egyptian armed forces and particularly the air forces are better equipped and better trained under Mubarak than at any other time in their existence. Chapter IV will focus on the Egyptian Air Force, examining both its composition and capabilities to ensure that national interests are met in the region.

## CHAPTER IV

### HISTORY OF THE EGYPTIAN AIR FORCE (EAF)

#### Introduction

The intent of this chapter is to present a brief history of the Egyptian Air Force for the purpose of providing background necessary to establish the military link between U.S. and Egyptian foreign policy. The chapter will cover not only the makeup of Egyptian air power from its infancy to present day, but will address past applications of force in an attempt to more clearly define its bumpy road to credibility. Snapshot views of several key moments in the history of the EAF will be presented to support the author's assertions that Soviet doctrine and training were deficient in meeting the needs of the EAF. It will assess the strategy of turning to western countries for arms and associated training, and comment on the wisdom behind that decision. The chapter will conclude with the presentation of the current Egyptian Air Order of Battle (AOB) as it compares to its greatest threat, the Israeli Air Force.

## The Beginnings: 1932 - 1954

The Egyptian Air Force, the Arab world's largest air force, dates from the formation of the Egyptian Army Air Force in 1932. It began operation with five small aircraft, which were used primarily for training and survey duties. Within two years of its formation, the Army Air Force possessed 26 aircraft, of which 20 were Avro 626 biplanes. The mission had been expanded by this time to include counter-smuggling operations.<sup>1</sup> Because of the strong British presence in Egypt, the force was organized along the lines of the Royal Air Force (RAF).

Following the signing of the Anglo-Egyptian Treaty of 1936 and the break with the army in 1939, the title of the force was changed to the Royal Egyptian Air Force. It remained a "royal" air force until the overthrow of King Farouk by the Free Officers in the 1952 revolution. At that time the "royal" was dropped, and to this day the force is known as the Egyptian Air Force.<sup>2</sup>

By World War II the EAF consisted of two squadrons of combat aircraft and three squadrons equipped for support of the army. Before being declared neutral in 1941, the EAF assisted the RAF in the protection of the Suez Canal but, owing to Egypt's neutrality, saw no action in WW II.<sup>3</sup>

The years following World War II were a time of growth for the EAF. The force acquired new equipment in the form of Supermarine Spitfire VB and IX fighters; Handley Page Halifax 9, Short Stirling and Avro Lancaster heavy bombers; North American T-6 Harvard and Miles Magister

trainers; Curtis C-46 Commando, Douglas C-47 Dakota and de Havilland Dove transport aircraft.<sup>4</sup>

In May 1948, the Egyptian armed forces invaded Israel. The EAF enjoyed little success in this first Arab-Israeli War, and the outcome was an arms embargo which compounded the difficulty of rebuilding the force.

#### Relations with the East: 1955 - 1972

It is interesting to note that in the early years of Nasser's presidency, Egypt turned first to the United States for military equipment. The Soviet Union showed caution in dealing with Egypt during the 1952 revolution. Egypt was too far from Moscow to receive much priority in 1954, and Moscow felt that the strong Islamic religious base made it too costly a prize.<sup>5</sup> Since the U.S. expressed good will toward the new regime, Nasser was optimistic that Washington was eager to support Egypt's military requirements. Negotiations between Cairo and Washington had virtually assured an arms package of \$200 million, but unfortunately before the agreement could be ratified, President Eisenhower took office. The resultant changes in U.S. foreign policy placed the emphasis on containment and forward-deployed bases capable of inflicting massive retaliation with atomic weapons, as the only way to contain the power of the Communist world. The idea of creating a local Egyptian pocket of defense was in direct contrast to this new U.S. policy and was essentially what caused Cairo to turn to Moscow in 1955.<sup>6</sup>

Soviet equipment, which was initially provided through Czechoslovakia, included MIG-15 fighters and trainers, IL-28 bombers,

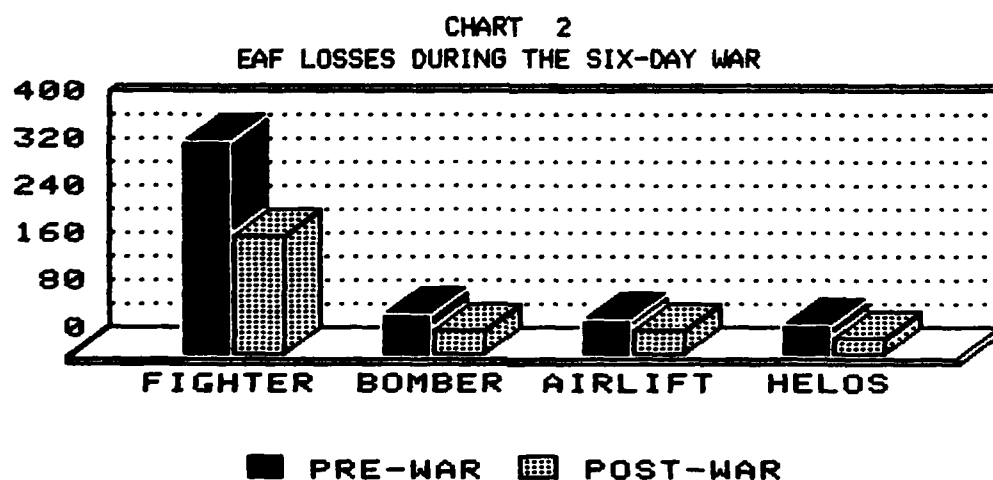
IL-14 transports, and YAK-11 trainers. The Soviet deliveries, including training in these aircraft were prompt; however, few of the aircraft were operational at the time of the Anglo-French-Israeli attack in 1956.<sup>7</sup> Egypt's air strength consisted of about 120 MIG-15's, 50 IL-28's, 60 Vampires and 20 Meteors. Unfortunately for Egypt, her flight crews had not possessed the equipment long enough to become efficient, and the maintenance crews were poorly trained.<sup>8</sup> As a result, the Egyptians were outclassed from the beginning.

The replacement aircraft, which began arriving in 1957 included MIG-15's and IL-28's, but the MIG-17 was among the deliveries for the first time. By the late 1960's and early 1970's some of the newer Soviet fighters, the MIG-19 and early MIG-21 series aircraft, arrived in Egypt. AN-12B transports and TU-16 heavy bombers were also provided. By June 1967, the EAF consisted of 550 aircraft, of which 380 were front-line jets, stationed at some fifteen operational air bases within Egypt. Approximately 350 of these were destroyed by Israel in a surprise attack which initiated the Six-Day War.<sup>9</sup> (See Chart 2 on page 34.)

The Six-Day War revealed more than a lack of preparation on the part of the Egyptian Air Force. It also exposed serious shortcomings in vital areas of training and doctrine, command and control, and technical expertise. Egyptian operational plans and navigation charts contained errors, showing a total lack of situational awareness which should have been evident from past encounters with the IAF. The rigidity in the planning of air operations, consistent with Soviet doctrine, severely limited flexibility, which the EAF badly needed. This in turn

contributed immensely to morale problems, which affected Egyptian pilots during the war. It seems as if the type and quantity of Soviet arms supplied were sufficient for Egypt's defense needs; however, the critical elements of doctrine and strategy required to train personnel and maintain equipment, as well as to employ the force and protect assets, were sorely lacking. "Rigidity, inflexibility, and centralization are the principle features of the Soviet doctrine - some of the very factors that brought on the downfall of the EAF."<sup>10</sup>

After the 1967 war and throughout the 1969 War of Attrition, Cairo maintained its dependence on the Soviets for a credible air arm. Their response in terms of aid and equipment was staggering in quantity, but still did not give Egypt serious first strike capability, which by 1972 Sadat desperately wanted. In addition, the Russians' presence in Egypt had become more painful than valuable. The new Egyptian president decided it was in the best interest of Egypt for the Soviets to leave, and officially expelled them in July 1972.

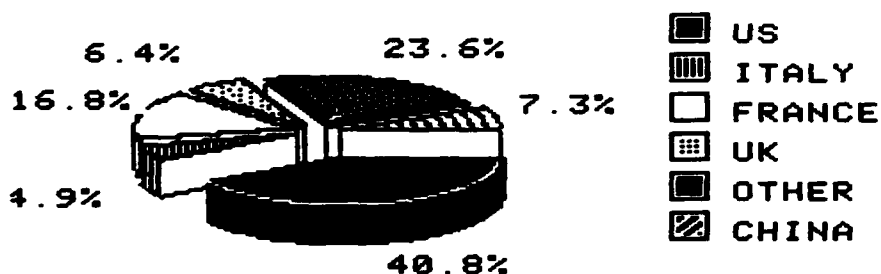


SOURCE: INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES,  
THE MILITARY BALANCE, 1966-67 AND 1967-68

## Relations with the West: 1973 - 1988

Although Egypt's arms acquisition philosophy shifted drastically with the Soviet expulsion, not until 1980 did Egypt begin receiving combat aircraft from the United States. (Egypt had received Mirage V aircraft through Libya in 1974 and Mirage III aircraft from France in 1976.) Paramount among Cairo's requirements for arms was diversification. As one high Egyptian Air Force general put it, "We are going from the Soviet era of vacuum tubes to the Western technology of integrated circuits, and we will never again be dependent on a single source of supply."<sup>11</sup> (See Chart 3 below.) Hastening Egypt's need for western supplies was the fact that her Soviet-supplied aircraft were aging and suffering a lack of spare parts, particularly engines. A large and costly engineering effort was undertaken to design and manufacture parts in an attempt to keep the fleet combat ready.

CHART 3  
PERCENT OF EGYPTIAN ARMS IMPORTS BY SUPPLIER, 1981-1985



SOURCE: U.S. ARMS CONTROL AND DISARMAMENT AGENCY,  
WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS, 1986  
(WASHINGTON, D.C., APRIL 1987).

Meanwhile, Sadat was preparing, in concert with several other Arab nations, to launch his October 1973 offensive. It is my opinion that this war is more significant than any of the preceding four Arab-Israeli wars, for two reasons. First, by bursting the Israeli bubble of invincibility, the Arabs restored pride and honor to the entire Arab world. For two decades, the Arab air forces and Egypt in particular had suffered heavy air-to-air losses in the one-sided Israeli victories of 1948, 1956, 1967, and 1969. EAF effectiveness at air intercept and interdiction was lacking, partly for the reasons mentioned earlier in the discussion of Soviet doctrinal shortcomings. Because of these previous results, the IAF had rightly concluded the EAF threat to be much less than it was in the 1973 war.

With the Soviets gone, the Egyptians began applying flexibility and individualism, characteristics in which the Arabs excel, to their planning and employment processes.<sup>12</sup> They developed a weapon to crater runways, based on the same weapon used on Egyptian airfields by the Israelis in 1967. They then added delayed-action bombs to inhibit runway repair. They disrupted command, control, and communications (C<sup>3</sup>) by knocking out the main Israeli command post for the Sinai front on the first day of the war, and destroyed the main ground-based electronic countermeasures station in the Sinai.<sup>13</sup> While still one-sided, the air-to-air war was not the closed issue that it had been in previous wars. Accounts of loss ratios vary greatly depending on the author, but one common belief is evident in most literature on this war. The IAF did not enjoy the complete and uninhibited use of the air as in past

wars. Robert Hotz, a writer for Aviation Week and Space Technology put it this way:

The Egyptian air force may not believe it won the air war of October, 1973, but it does believe that it was able to stay in the air and slug it out with the best the Israeli air force had to offer, that it denied the enemy the freedom of operation over Egyptian forces to which it had become accustomed, that it carried the attack to enemy ground forces in crucial periods and that it has knocked considerable chrome off the Israeli air force's halo of invincibility.<sup>14</sup>

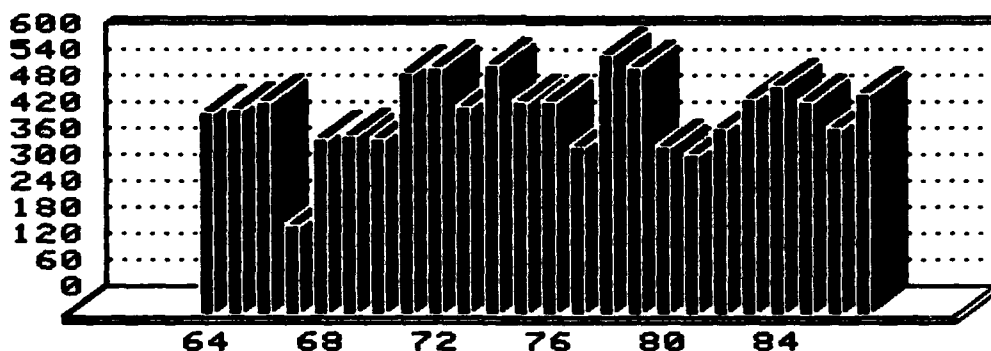
Second, this Arab-Israeli war is the first one that brought the U.S. and the Soviet Union face to face in the Middle East. The massive resupply efforts on the part of both superpowers made this the most dangerous confrontation to date. In my opinion, the primary determinant of the intensity with which the U.S. sought a halt to the fighting was the imbalance of forces presenting an extreme threat to the nation of Israel. This was a valuable lesson for Israel and the U.S. and helped force the issue of bilateral peace between Egypt and Israel. Stated another way, the more formidable one's opponent, the more incentive one has to make peace with that opponent.

Since the 1973 war, Egypt's main thrust in air power has been to modernize the force, as opposed to expanding it. In fact, the size of the EAF has remained fairly constant over the past 24 years, with the exception of 1967, when combat attrition depleted its aircraft. (See Chart 4 on page 38.)

As the aging Soviet aircraft became obsolete and too costly to maintain, Cairo began to replace them with western hardware. Initially, the Carter administration offered to sell Egypt 50 F-5E aircraft, although 120 had originally been requested. However, in January 1978,

President Sadat, frustrated over the impasse in peace talks with Israel, refused the F-5's and instead asked for F-15's and F-16's.<sup>15</sup> (The first F-16 aircraft would not be delivered to the U.S. Air Force for more than a year and a half.) He felt Egypt needed the aircraft to gain equivalent bargaining power with the Israelis, thereby linking arms with the negotiating process.<sup>16</sup> As a compromise, Washington proposed the sale of F-4E aircraft complete with a pilot and maintenance training package in the U.S. Consequently, by July 1980, Egypt had 35 Phantoms in her air force, which was rapidly taking on an international appearance. (See Chart 5 on page 39.)

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**CHART 4**  
**EGYPTIAN COMBAT AIRCRAFT: 1964 TO 1987 BY YEAR**



**SOURCE: INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES,  
 MILITARY BALANCE 1964 TO 1988**

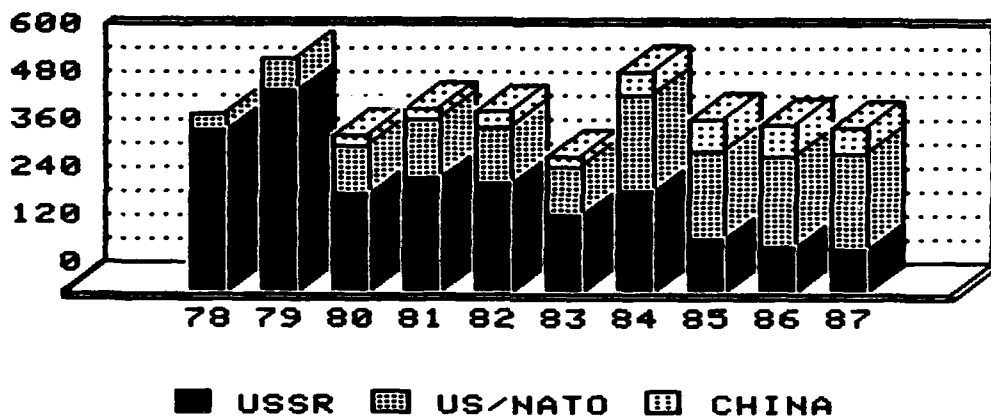
**NOTES**

1. The 1972 - 1980 totals include many aircraft grounded for lack of spare parts.
2. The 1974 total is an estimate based on massive Soviet replacement of aircraft lost in the October 1973 War.
3. Totals represent only combat aircraft, including armed helicopters. Transport and trainer aircraft not included.

The frustration that caused President Sadat to expel the Soviets in 1972, was a blessing in disguise for Egypt. By his forcing the change, Egypt's armed forces, and in particular her air force, are much better equipped and capable. Three areas which provide high returns on Cairo's investment are training, tactics (employment), and technology (equipment).

The U.S. military assistance program currently provides for the most modern, technologically advanced equipment available anywhere, as well as complete training packages designed to build a credible user-maintenance force in the minimum time required. U.S. training facilities and programs are second to none and, as such, offer unparalleled training opportunities to developing, allied nations. Egyptian aircrews and maintenance personnel have participated in these types of programs with their U.S. supplied F-4's and F-16's.

CHART 5  
EGYPTIAN COMBAT AIRCRAFT BY MAJOR SUPPLIER

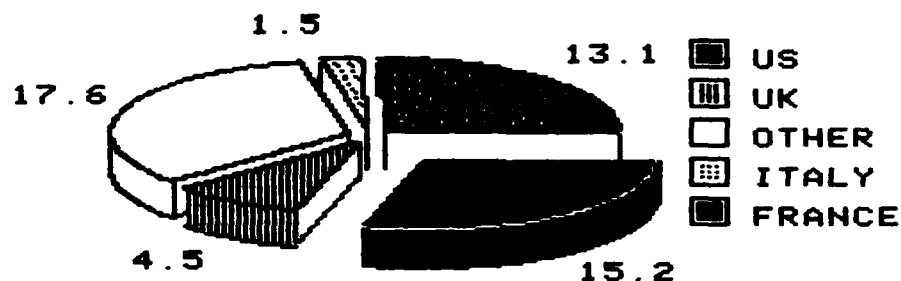


SOURCE: INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES,  
THE MILITARY BALANCE, 1978 TO 1987

Closely linked with training are the tactics used to employ a weapon system in combat to achieve its maximum effectiveness. In this area the strategy of western air forces differs greatly from that of the Soviet Union. Probably the greatest asset that an air force brings to the battle is that of flexibility. To exploit this asset requires unbounded imagination and freedom to act, within the scope of broadly defined employment guidelines. This is precisely what U.S. air commanders are encouraged to do with their forces. Sound tactics, designed to increase the effectiveness of airpower, must be considered force multipliers which enhance combat power. Just the opposite can be said for suppressing initiative and freedom of action. U.S. training programs provided EAF pilots the opportunity to see and experience this firsthand. Owing to the overwhelming Israeli success in the Yom Kippur War and the limited Egyptian success in the 1973 War, Egyptian pilots learned this lesson the hard way.

The United States is the largest arms exporter to the Middle East in the free world.<sup>18</sup> (See Chart 6 below.)

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 CHART 6  
 VALUE OF ARMS TRANSFERS, 1981-1985, BY MAJOR SUPPLIERS  
 TO THE MIDDLE EAST (BILLIONS OF US\$)



SOURCE: U.S. ARMS CONTROL AND DISARMAMENT AGENCY,  
 WORLD MILITARY EXPENDITURES AND ARMS TRANSFERS, 1986

There are several reasons for this, not the least of which is quality of product. Weapons systems acquisition practices tend to vary greatly between eastern and western bloc producers. Specifically, these differences exist in the areas of design and growth philosophy, reliability and maintainability, and human factors.<sup>19</sup> Western arms producers build aircraft which maximize performance and possess growth potential. Soviet aircraft are designed to meet functional requirements with little growth potential. The U.S. designs reliability into the aircraft and insures maintainability through a system of modular replacements, while the U.S.S.R. relies heavily on off-the-shelf components whose reliability is an absolute based on experience.

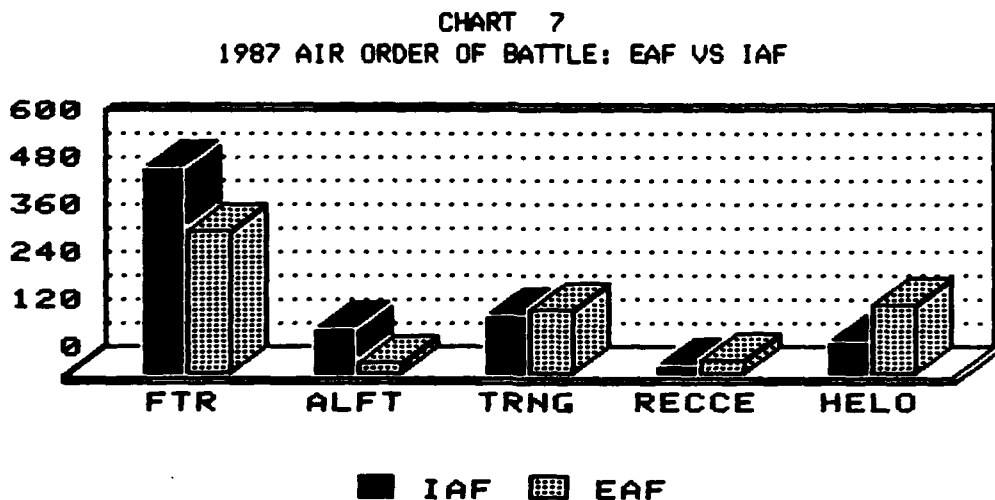
Finally, the element of human factors is an area where great strides have been made in the west. In order to effectively employ modern weapons systems such as the F-15E and F-16C, significant accommodations to the pilot must be included from the initial design phase. Incorporation of aural aircraft cues for the pilot, discriminant computer logic which filters "nice to know" from essential information, and computed weapons delivery accuracy which permits a high probability of achieving a first pass kill are all essential. Probably most important in this area, however, is physiological protection of the pilot. Innovations such as reclined seats and high-flow valves which permit rapid anti-G suit inflation are essential in modern-day fighter aircraft.

The decision to look west for arms brought these advantages to the EAF. With the introduction of new Soviet fighters such as the MIG-29 and MIG 31, which incorporate some of these concepts, there is evidence

that the east is paying more attention to reliability, maintainability, and human factors. Still there is little evidence to suggest that the Soviet Union is willing to export its front-line technology to Egypt. In fact, history indicates the opposite. Western arms alliances have provided Egypt with better, more capable equipment than would be possible through eastern bloc countries.

#### Comparative Analysis of EAF and IAF

While it is difficult to compare the capabilities and effectiveness of two air forces, one logically must begin with equipment, assessing both quantity and quality. Of interest here is the fact that although Israel is roughly 1/50th the size of Egypt and has roughly 1/10th the population, she has spent more money for arms than Egypt every year since 1978.<sup>20</sup> Chart 7 below provides a comparison of quantity of aircraft.



SOURCE: INTERNATIONAL INSTITUTE FOR STRATEGIC STUDIES,  
THE MILITARY BALANCE, 1987-1988

Of course, numbers by themselves mean little. Quality of the equipment is a big determinant in the analysis also. For example, more than 100 of Egypt's fighters are MIG-21's or the Chinese variant of that aircraft, the F-7. While the MIG-21 is certainly a credible day fighter, its basic design dates to the mid-1950's. It is outclassed in almost every respect by today's modern fighter aircraft. In addition, Israel possesses about 50 F-15's, generally accepted within the fighter pilot community to be the world's premier air-superiority fighter. In both quantity and quality of equipment, the IAF holds a decided advantage.

The final determinant in this air force comparison is the personnel force, primarily the pilots and aircrews. The noted World War II German ace, Adolph Galland, succinctly captured the essence of importance attributed to this element of the force when he said, "Only the spirit of attack born in a brave heart can bring success to any fighter aircraft, no matter how highly developed it may be."<sup>21</sup> Certainly Galland was not downplaying the importance of modern, well-maintained aircraft as a precursor to victory in the air. Given relatively equal numbers of aircraft, each type possessing similar capabilities, victory in the air will undoubtedly go to that side which is better trained and more willing to press the "spirit of attack." Here, for two reasons, the IAF has the upper hand.

The first reason has to do with experience. By way of analogy, an athletic team can be used to explain this point. To be able to synergize the elements of individual and team performance necessary to achieve maximum potential, athletic teams require game experience. They

simply cannot achieve in practice sessions the realism and level of intensity required to win against a credible opponent. Similarly, the most realistic training exercises cannot replace the experience which actual combat provides. In this regard, the Israeli Air Force is the most experienced air force in the world today. Many EAF pilots who participated in the 1973 war are either no longer on active service or are in high-level supervisory positions. The value of combat experience tends to decline as new technology drives changes in doctrine, strategy and force posture. The IAF's experience is much more recent.

The second reason why the IAF must get the edge in terms of personnel has to do with nationalism. Israel is literally surrounded by Arab countries and has fought five wars and countless skirmishes with them since 1948. Fear of extermination is a constant concern of Israel and has spawned a *credible fighting force*. Israel's size and population prohibit a large standing army; therefore, she relies on her air force to provide the time needed to mobilize the ground forces. This reliance on the air force has bred in it the patriotic feeling that the fate of the nation may very well rest upon its shoulders.

While the EAF is no match for the IAF, there are advantages to Egypt in maintaining a credible air arm. These advantages extend well beyond the military sphere and will be discussed in the next chapter.

## CHAPTER V

### EGYPTIAN FOREIGN POLICY AND STRATEGY ASSESSMENT

#### Introduction

The intent of this chapter is to define and assess the current national strategy of Egypt, and the role the EAF plays in making possible its successful achievement. In doing so, it will discuss current foreign policy objectives vis-a-vis the U.S., Israel, and the Arab world. It would be inconclusive to discuss foreign policy without understanding those domestic issues which influence it. In Egypt's case I will argue that domestic issues exert much more than a casual influence on foreign policy, indeed they have become a major driver. To this end, and because foreign and domestic policies in Egypt are tightly interwoven, it is imperative we understand those issues. The chapter will conclude by answering the question, "Is Egypt's current national strategy of positive or negative value to U.S. interests in the Middle East, and why?"

#### The Economic Dilemma

Any discussion of problems internal to Egypt must involve an economic analysis. By whatever measure one chooses, Egypt's economic condition is acutely unstable -- even more so today than when Mubarak took office. Declining foreign exchange revenues, in the form of falling oil prices and remittances of expatriate workers, are the primary contributors. Reductions in tourism and Suez Canal revenues add

to the problem. Egypt cannot feed or adequately house her population, which is growing by 2.7 percent every nine months. The country needs to create 400,000 jobs annually for new entrants to the labor market. Debt service obligations are about 35 percent of foreign exchange earnings, and the food import requirement consumes another 35 percent.<sup>1</sup> Only through massive U.S. aid to the tune of \$18 billion over the past decade has the system survived and the Mubarak government avoided catastrophe.<sup>2</sup>

Closely linked to the dissatisfaction caused by Egypt's economic woes is the movement supporting the rise of Islamic fundamentalism. This movement, similar to the one which toppled the Shah of Iran's government, is becoming increasingly critical of Egypt's ties with the west and calls for a rejection of western values, as well as the political and economic models which embody those values.<sup>3</sup> Mubarak's task in this regard is formidable. He must continue to push for economic reform while allowing the fundamentalists to pursue their interests, which often are in opposition to one another.

Up to this point, Mubarak's reform efforts have been designed to postpone crisis, as opposed to implement long-term reform. I think there are two reasons for this. First, there is no easy solution. To make an impact on the economic problems confronting Egypt today requires implementing extremely austere measures, such as reducing government subsidies on food. This was tried by Sadat and ended in widespread rioting throughout Cairo, with the loss of many lives. Second, Mubarak has not achieved the hero status which both Nasser and Sadat enjoyed among Egyptians. The political environment has not given him the chance to shine as it did both his predecessors. Therefore, he has not

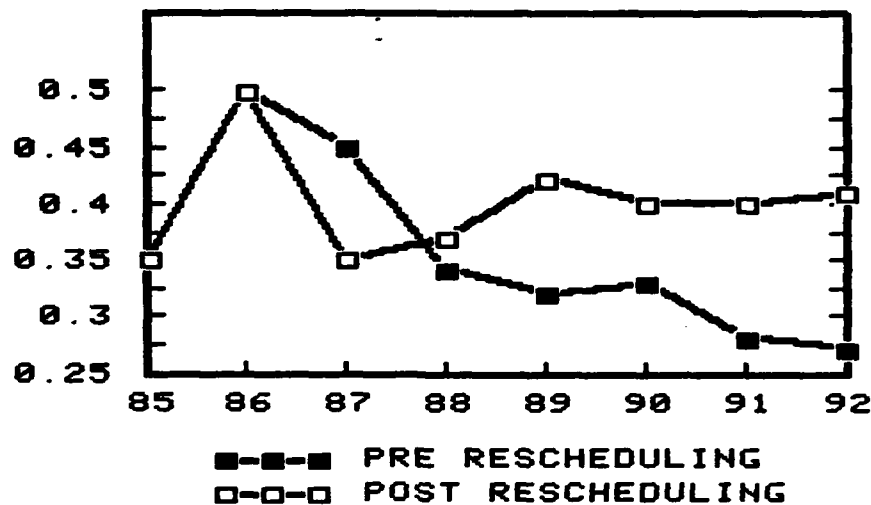
realized the legitimacy required to implement the type and amount of "belt tightening" it would take to have a positive, long-term effect on the problem.

I do not see the government toppling because of the economic issue as long as Mubarak continues to work the problem through organizations such as the International Monetary Fund (IMF) and the Paris Club, an organization formed by western creditor nations and financial institutions to carry out negotiations with debtor countries. The Paris Club recently agreed to reschedule \$10 billion of Egypt's debt, resulting in a reduction of Egypt's debt service ratio from 50 percent in 1986 to 35 percent in 1987. The increase in interest payments over the rescheduling period, however, will force additional borrowing, which will push the debt service ratio higher in the near future, thus making any relief temporary. (See Chart 8 on page 48.) Egypt, like most other debtor third world nations, will be forced to reschedule this payment annually.<sup>4</sup>

#### National Strategy and Foreign Policy

Since Mubarak took office in late 1981, his national strategy has been oriented toward achieving peace within the region -- more specifically, a peace between Israel and the neighboring Arab states, allowing for autonomous governments to exist within clearly defined, defensible borders. Foremost in his efforts to accomplish this has been his quest for reacceptance by the Arab world. To a great degree he has been successful, but with less than total forgiveness on the part of the

CHART 8  
EGYPT'S DEBT SERVICE RATIO



SOURCE: MIDDLE EAST REPORT, JULY-AUGUST 1987  
NOTES

1. Debt Service Ratio is the sum of payments on principal and interest divided by foreign exchange earnings.

moderate Arab states. Mubarak perpetuates this less than full acceptance with his insistence on abiding by Camp David, which is certainly in the best interest of Egypt. In addition, Egypt's bilateral peace is seen by the Arab states as a license for Israeli military incursions, with Lebanon being the most prominent example. Without the threat of Egyptian retaliation or Egyptian military support to any Arab coalition, the odds of an Arab-initiated military confrontation with Israel remain remote.

The Egyptian Air Force is the ace up Mubarak's sleeve and the reason it makes sense for the Arab world to court Cairo's favor. The increase in capability brought about by modernization has given Mubarak the ability to do what Sadat never could, namely launch a

credible first strike against virtually any target in Israel. That Egypt has no desire to do so at this time is irrelevant. A common saying throughout the region expressing this dependence is: "No war without Egypt. No peace without the Palestinians."<sup>5</sup>

On occasion Mubarak has shown his disapproval of Israeli actions. He withdrew his ambassador from Israel following the Lebanese massacres; he has allowed the dispute over the territory at Taba near Eilat to heat up; and he has been vocal about Israeli reluctance to move ahead with a solution on Palestinian autonomy.<sup>6</sup> When coupled with his cooling of the relationship between Cairo and Washington, one cannot discount the possibility, albeit remote, of a future Egyptian-led Arab military coalition designed to force Israel off top dead center in the Palestinian issue.

This partial realignment with the Arab world has affected relations with the U.S. Clearly, after six years in office, Mubarak's position on superpower alliances is demonstrably different from that of Sadat. Mubarak sees fewer advantages in close relations with the U.S. and seems to prefer a more distant, non-aligned relationship, short of curtailing U.S. aid to Egypt. There is definitely disillusionment in Cairo, shared by the Arab world, that efforts on the part of the Reagan administration to solve the Palestinian homeland problems have been half-hearted at best. Egypt recognizes by now that Israel's interpretation of the first Camp David accord in essence renders it a defunct document, and that it was never Israel's intention to return the West Bank. In spite of this, Mubarak will not turn his back on the U.S. as Sadat did the Soviets, for two reasons. First is the matter of U.S. aid already

discussed. No other western developed nation can and will supply Egypt with the quantities of food and arms the U.S. does. Second, and just as important to Egypt, is the matter of Arab-Israeli peace. Mubarak realizes that only the U.S. has sufficient influence over Israel to force the concessions necessary to move forward. That no American administration has been willing to buck the Jewish lobby and exert that influence is of little consequence in dissuading the Arabs of this belief. As late as February 1988, Mubarak visited Washington in his latest effort to stimulate U.S. efforts for peace in the region. Secretary of State George Shultz is, at the time of this writing, vigorously pursuing an answer to the Palestinian issue.

#### Conclusion

Addressing the thesis of insurability of U.S. interests in the region presupposes that U.S. and Egyptian interests within the region are at least similar. I would argue that, in most cases, they are. Having discussed Egyptian interests and the resultant foreign policy under Mubarak to achieve them, I offer the following as U.S. national interests in the region:

1. A strong commitment to the survival of Israel as a nation. With the signing of the Camp David Accords, Egypt essentially recognizes the right of Israel to exist within pre-1967 borders.
2. A reduction of the Soviet Union's ability to influence the region. Although Egypt and the USSR re-established formal diplomatic

relations in 1984, Mubarak's policy of non-alignment lessens the opportunity for influence from Moscow.

3. Guaranteed access to the region's vast petroleum resources through maintenance of freedom of navigation throughout the Middle East.

The success of achieving these interests is contingent upon long term stability within the region, a stability which the United States cannot possibly maintain unilaterally. Washington must rely heavily on the Mubarak government to exert its influence as the unspoken leader of the Arab world. As long as Mubarak continues in his path toward Arab reconciliation and unity as a road to peace and as long as Egypt maintains the bilateral peace with Israel, minimizing the possibility of war, then U.S. interests are served in the region. Barring financial collapse leading to the downfall of the Mubarak government, and assuming Washington will continue its massive aid program to Cairo, Egypt will remain a valuable ally and continue to insure U.S. interests in the region for years to come.

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